REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-30 are currently pending. The present Amendment amends Claims 1 and 12. The changes to the claims are supported by the originally filed application and do not introduce new matter.

In the outstanding Office Action, Claims 21-30 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite and Claims 1-30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pages (U.S. Patent No. 5,774,818) in view of Trikha (U.S. Patent No. 6,003,811).

In response to the rejection of Claims 21-30 under 35 U.S.C. § 112, second paragraph, Applicant respectfully requests reconsideration of the rejection and traverses the rejection as discussed next.

The Office Action asserts at page 2 that "a single function is embedded in the flight control computer," as recited in Claim 21, is ambiguous and rejects independent Claim 21 and associated dependent Claims 22-30 on the basis that "[i]t is not clear if the "function" means a "device" implemented in the flight control computer or if the "function" means just one "duty" or one "control" performed in the flight computer." Applicant respectfully disagrees and submits that the word "function" is not an ambiguous term and cannot be construed as a device. A device is an object. A function, however, is an action, i.e., something performed, for example, by an object. For instance, Webster's defines a function as "*a)* an action which is part of a series leading to a resulting action *b)* an operational instruction for programming an electronic device, as a digital watch, computer, etc.; also, an operation performed by such a device as a result of such an instruction."[1] Whereas the

[1] Webster's New World College Dictionary, Fourth Edition, p. 573.

claimed invention is not limited in any way to the definition cited herein, the definition clearly shows that the word "function" is not at all ambiguous and, in particular, cannot be confused with a device as asserted in the Office Action. Applicant further supports the contention that the expression "control function" is not ambiguous by an observation that this expression has been used in several patents. For example, U.S. Patent No. 6,586,848, directed to a function selecting control system, discloses in Claim 1 a function selecting control system including, inter alia, "a control logic block for storing various ***control functions***" and U.S. Patent No. 6,424,900, directed to a multi-module control-by-wire architecture, discloses in Claim 1 a control-by-wire control system including, inter alia, a "plurality of ***control functions*** [that] is distributed among and allocated to said plurality of control modules."

Therefore, in light of the above discussion, Applicant respectfully submits that "function" is not ambiguous and requests that the 35 U.S.C. § 112, second paragraph, rejection be withdrawn. Should the Examiner feel that the rejection should be maintained, Applicant respectfully requests that the Examiner contact the undersigned by telephone in an effort to devise mutually acceptable language.

In response to the rejection of Claims 1-20 under U.S.C. § 103(a), Claims 1 and 12 are amended to further clarify the claimed invention. Specifically, Claims 1 and 12 now recite that the guidance instructions include "heading, vertical speed, and altitude" and that the automatic pilot instructions are "computed by said navigation computer from said guidance instructions." These features find non-limiting support in the originally filed application, for example at page 6, lines 8-10. Further, in light of the discussion below and being allowed features of the parent application (now U.S. Patent No. 6,694,230), these features are not believed to require the Examiner to perform a new search and it is thus

respectfully requested that the amendments be entered despite the outstanding Office Action being final.

Applicant respectfully submits that the claimed automatic pilot instructions are not taught by Pages and Trikha. This was believed to be clear based on the arguments filed on December 28, 2004. However, the Office Action responded by asserting at page 5 that the Examiner read "the calculated path Rn with the next point Pn to be reached" of Pages as the claimed "automatic pilot instructions." Applicant respectfully submits that this characterization is not consistent with the specification as further discussed next.

The Office Action identifies the "computer 12" and "automatic pilot device 13" as analogous to the claimed "navigation computer" and "flight control computer," respectively. The Office Action asserts at page 5 that "the computer 12 (fig. 4) of Pages automatically determine[s] the path to be followed and output the calculated path Rn with the next point Pn to be reached," which calculated path is read as the claimed "automatic pilot instructions." However, the Office Action incorrectly asserts at page 5 that "[t]he specification page 6, lines 8-13 of the present application teaches that the navigation computer 9A (fig. 1) calculate[s] guidance instruction such as headings, altitude, etc. and the flight control computer 3 (fig. 3) uses the headings, altitude etc. to determines the automatic commands for the control surfaces." Applicant respectfully submits that page 6, lines 8-13, states that "[f]rom guidance (heading, vertical speed, altitude, etc.) instructions ***sent to it by the device 10***, the navigation computer 9A calculates three automatic pilot instructions, namely a commanded vertical load factor, a commanded roll rate and a commanded yaw." Therefore, Applicant respectfully submits that (1) the navigation computer 9A does not "calculate guidance instruction such as headings, altitude, etc." as asserted in the Office Action since it receives such instructions as input from the device 10; and (2) the flight control computer 3 does not "use the headings, altitude etc. to determine the automatic commands for the control surfaces" as asserted in the

Office Action, but rather uses the three automatic pilot instructions computed by the navigation computer to compute automatic commands for the control surfaces.

Applicant thus respectfully submits that the claimed "automatic pilot instructions" and what is read as such in Pages by the Office Action are completely different. In Pages, the computer 12 (identified in the Office Action to be analogous to the navigation computer 9A), determines the "path to be followed" and the "automatic pilot device 13" (identified in the Office Action to be analogous to the flight control computer 3) computes the commands for the control surfaces based on the path provided by the computer 12. However, in the claimed invention, the navigation computer does not compute the path, but instead computes the specific automatic pilot instructions (e.g., vertical load, roll, yaw) corresponding to the path it has already been supplied with, and the flight control computer does not compute the commands for the control surfaces based on the path, but rather based on the specific automatic pilot instructions. To ensure that the claimed subject matter is as clear as possible, Applicant amended independent Claims 1 and 12 to distinguish over the prior art by specifying where, and based on what, the claimed automatic pilot instructions are being computed.

Accordingly, since the Pages patent does not teach all the limitations of amended independent Claims 1 and 12, and since the Trikha patent does not cure those deficiencies, the Pages and Trikha patents, whether taken alone or in combination, fail to teach or suggest every feature recited in Applicant's claims, so that Claims 1-20 are patentably distinct over the prior art. In particular, Pages and Trikha do not teach "a first input configured to receive guidance instructions ***including heading, vertical speed, and altitude***" and "an output configured to output automatic pilot instructions ***computed by said navigation computer from said guidance instructions***," as recited in amended independent Claim 1 (and similarly

recited in amended independent Claim 12). Accordingly, Applicant respectfully requests reconsideration of the rejection based on the Pages and Trikha patents.

In response to the rejection of Claims 21-30 under U.S.C. § 103(a), Applicant respectfully requests reconsideration of the rejection and traverses the rejection as discussed next.

Briefly recapitulating, Applicant's invention, including: (1) a navigation computer configured to receive guidance instructions and parameters, and to output automatic pilot instructions; and a flight control computer configured to receive control instructions and said automatic pilot instructions, and to generate a first plurality of operating commands based on said automatic pilot instructions in an automatic pilot mode, wherein ***a single control function is embedded in the flight control computer.***

The Office Action asserts at page 5 regarding independent Claim 21 that "Pages disclose one function PA 13 (fig. 4) in the flight control computer." To that effect, and in light of the above discussion that the word function cannot be construed as a device, Applicant respectfully submits that "one function PA 13" is not a proper statement since it uses "PA 13" which is a device in Pages along with the word "function" which is not a device by definition. Further, even if PA 13 were to comprise functions, Applicant respectfully submits that Pages neither teaches or suggests the claimed ***single*** control function, which is a feature of the claimed embodiment of the invention that leads to an improved system for operating an aircraft.[2] Specifically, and according to this particular embodiment, avoiding multiple control functions avoids the associated significant costs and multiple validation of the control functions. Moreover, the claimed ***single*** control function makes it possible to reduce the delays between the inertial information and the operating commands given by the automatic pilot to the control surfaces.

[2] See Applicant's specification at page 2, lines 12-20.

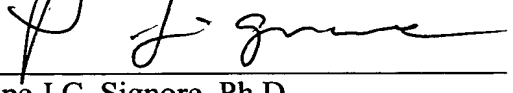
Accordingly, since the Pages patent does not teach all the limitations of independent Claim 21, and since the Trikha patent does not cure those deficiencies, the Pages and Trikha patents, whether taken alone or in combination, fail to teach or suggest every feature recited in Applicant's claims, so that Claims 21-30 are patentably distinct over the prior art. In particular, Pages and Trikha do not teach "***a single control function is embedded in the flight control computer***," as recited in independent Claim 21. Accordingly, Applicant respectfully requests reconsideration of the rejection based on the Pages and Trikha patents.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-30 is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicant's undersigned representative at the below listed telephone number.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



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